

## **Harvey County**

## Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 6/11/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 23 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Harvey County economy.<sup>1</sup>

These 23 sectors have a total direct output of approximately \$1.17 billion and support 2,798 jobs in Harvey County. Running the model for all 23 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Harvey County Economy									
Impact Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output⁵	Output % of Gross Regional Product			
Direct Effect	2797.9	13.56%	\$286,809,378	21.26%	\$1,174,893,157	87.08%			
Indirect Effect	741.4	3.59%	\$47,398,978	3.51%	\$94,446,204	7.00%			
Induced Effect	856.4	4.15%	\$49,151,368	3.64%	\$92,664,118	6.87%			
Total Effect	4395.6	21.31%	\$383,359,725	28.41%	\$1,362,003,479	100.95%			

As shown in the above table, agriculture, food, and food processing sectors support **4,396 jobs**, or **21.31%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$1.36 billion**, roughly **100.95%** of the economy.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 23 agriculture, food, and food processing sectors is approximately \$383.4 million, or 28.41% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 28.41% of the total economy.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: http://www.implan.com/index.php?option=com\_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the farm machinery and equipment manufacturing sector is the top employer with **1,112 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Harvey County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment				
Sector	Total Employment	Total Output		
Farm machinery and equipment manufacturing	1,111.7	\$584,029,772		
Lawn and garden equipment manufacturing	579.8	\$308,254,327		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	409.0	\$44,592,417		
Grain farming	195.3	\$66,638,436		
Wholesale trade	132.7	\$25,376,267		
Landscape and horticultural services	116.9	\$4,113,788		
Animal, except poultry, slaughtering	115.7	\$83,194,574		
Real estate	86.2	\$9,254,246		
Limited-service restaurants	75.2	\$5,473,042		
Veterinary services	61.8	\$5,912,841		

The farm machinery and equipment manufacturing sector directly contributes approximately \$584.0 million to the Harvey County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output				
Sector	Total Employment	Total Output		
Farm machinery and equipment manufacturing	1,111.7	\$584,029,772		
Lawn and garden equipment manufacturing	579.8	\$308,254,327		
Animal, except poultry, slaughtering	115.7	\$83,194,574		
Grain farming	195.3	\$66,638,436		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	409.0	\$44,592,417		
Oilseed farming	42.4	\$40,715,691		
Wholesale trade	132.7	\$25,376,267		
Owner-occupied dwellings	0.0	\$18,933,711		
Fertilizer mixing	26.9	\$16,906,279		
Real estate	86.2	\$9,254,246		

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Harvey County economy.

All Agriculture, Food, and Food Processing Sectors				
Sector	Total Employment	Total Output		
Oilseed farming	42.4	\$40,715,691.29		
Grain farming	195.3	\$66,638,436.47		
Vegetable and melon farming	3.9	\$736,474.88		
Fruit farming	1.9	\$155,368.85		
Tree nut farming	0.3	\$47,317.46		
Greenhouse, nursery, and floriculture production	4.7	\$612,490.60		
Cotton farming	4.7	\$1,132,594.60		
All other crop farming	21.9	\$1,544,460.08		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	409.0	\$44,592,416.92		
Dairy cattle and milk production	9.7	\$3,734,500.58		
Poultry and egg production	1.6	\$1,196,709.21		
Animal production, except cattle and poultry and eggs	37.3	\$4,314,968.31		
Commercial logging	4.7	\$210,988.26		
Commercial hunting and trapping	9.7	\$195,627.31		
Animal, except poultry, slaughtering	115.7	\$83,194,573.93		
Bread and bakery product, except frozen, manufacturing	24.0	\$2,890,541.05		
Frozen cakes and other pastries manufacturing	1.4	\$222,204.65		
Fertilizer mixing	26.9	\$16,906,278.65		
Farm machinery and equipment manufacturing	1111.7	\$584,029,772.42		
Lawn and garden equipment manufacturing	579.8	\$308,254,326.77		
All other industrial machinery manufacturing	13.0	\$3,736,645.01		
Veterinary services	61.8	\$5,912,841.13		
Landscape and horticultural services	116.9	\$4,113,788.24		

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Harvey County, the retail sector was omitted.